REMARKS

In response to the final Office Action mailed June 3, 2008, Applicant has amended the application as above. No new matter is added by the amendments as discussed below. Applicant respectfully requests the entry of the amendments and reconsideration of the application in view of the amendments and the remarks set forth below.

Discussion of Claim Amendments

Claims 1-9 and 13-15 have been amended. Upon the entry of the amendments, Claims 1-9 and 13-15 are pending in this application. The amendments to the claims are merely for clarification and do not narrow the scope of protection. Furthermore, the amendments to the claims do not introduce any new matter. Entry of the amendments is respectfully requested.

Discussion of Specification Objection

The Examiner objected to the specification because of certain informalities. In reply, the relevant portion of the specification has been amended as reflected in the "Amendments to the Specification" section to resolve the issues addressed by the Examiner. Withdrawal of objection is respectively requested.

Discussion of Claim Objections

The Examiner objected to Claims 2, 5 and 8 as lacking of third and fourth equation trees. In reply, Claims 2, 5 and 8 have been amended as reflected in the "Amendments to the Claims" section to resolve the issues addressed by the Examiner. Withdrawal of objection is respectively requested.

The Examiner objected to Claims 1, 2, 4, 5, 7 and 8 because of certain informalities. In reply, Claims 1, 2, 4, 5, 7 and 8 have been amended as reflected in the "Amendments to the Claims" section to resolve the issues addressed by the Examiner. Withdrawal of objection is respectively requested.

The Examiner further asserts that "all of the subscript symbols" such as p.1, p.n, and subscript symbols such as $r|p$ and $1|p$ are not described /recited with the associated representations in respect to the exact meaning of the argument terms of a function. In reply, Applicant respectfully

submits that the notation system used in the claims was well known and commonly used by a person with ordinary skill in the art before the filing date of this application. As one example, Applicant would like to provide the following.

At first, Applicant explains the concept of representing data in this technical field. "Position" means a position or location in data having a tree structure. Nodes of a tree are represented by strings of positive integers including "empty." For example, "ε" is used to represent empty and "1.1" is used to represent position 1.1. Data having a tree structure have the following features (i)-(iii).

(i) There is only one root position in the tree.

(ii) Each path from the root position to other position is prefix-closed. "Prefix-closed" indicates, for example, if a tree includes position 1.1.2, the tree also includes position 1.1.

(iii) If there is a path from a position to other position in a tree, the path is uniquely defined, i. e., there is only one route between those positions.

For example, a tree represented by f(a, g(b)) is shown below and positions of the trees are "ε", "1", "2" and " 2.1". "1" and" 2" indicate nodes represented by symbols "a" and "g" located at the level next to the root position. "2.1" indicates the node represented by the symbol "b" which is connected to position "2" and located at the level next to the level including positions "1" and "2".

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      f
     / \
    a   g
        |
        b
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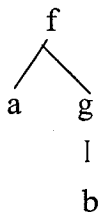
Therefore, the meanings of subscript symbols described in this application are as follows.

Subscripts "p", "p.1" and "p.n" respectively indicate "position p", "position p.1" and "position p.n" in a tree. Subscripts "q", "q.1" and "q.n" respectively indicate "position q", "position q.1" and "position q.n" in a tree.

"$r_{|p}$" indicates a sub-tree structure below "position p" in tree "r". "$1_{|q}$" indicates a sub-tree structure below "position q" in tree "1". For example, regarding the above tree f (a , g (b)), f (a, g (b))$_{|2}$ means g (b) .

The above-described notation system is commonly used in many documents published before the filing date of this application, such as "Term Rewriting and All That (Franz Baader and Tobias Nipkow), Cambridge University Press, Hardback (February 1998), ISBN 0-521-45520-0, Paperback (August 1999), ISBN 0-521-77920-0", "Term Rewriting Systems (Jan Willem Klop) , Cambridge University Press, Hardback (March 2003), ISBN: 9780521391153" and "Handbook of Logic in Computer Science, Vol II (S. Abramsky, D. M. Gabbay, and T. S. E. Maibaum), pp. 1-116, Oxford University Press(1992)." For Examiner's reference, Applicant has attached a copy of two pages of "Term Rewriting and All That (Franz Baader, Tobias Nipkow)" describing the same contents as explained above.

In view of the above, Applicant respectfully submits that the specific meanings of the subscript symbols such as p.1, p.n, $_{r|q}$ and $_{1|p}$ were clear to a person of ordinary skill in the art before the filing date of this application. As such, Applicant believes that it is unnecessary to include such a specific definition in the claims. Withdrawal of objection is respectively requested.

Discussion of Rejections of Claim under 35 U.S.C. § 112, ¶ 2

Claims 1, 2, 4, 5, 7 and 8 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite. The Examiner asserts that the phrase "such as" renders the claims indefinite. In order to expedite the prosecution of this application, Applicant has amended the term from "such as" to "which is."

The Examiner asserts that the phrase "(H) obtaining said second equational tree automaton by performing repeatedly said (F) selecting and (G) determining processes regarding all elements q positioned at the ends of said tree-structure of said second group" is indefinite and not clear with respect to exactly when the repeated process (F) and (G) can be terminated. Applicant respectfully disagrees. Applicant believes that the time when the repeated process (F) and (G) can be terminated is clearly defined the (H) process of the claims, .i.e., "by performing repeatedly said (F) selecting and (G) determining processes regarding all elements q positioned at the ends of said tree-structure of said second group." For example, in one embodiment of the claimed invention, the (F) and (G) processes are terminated just after the (F) and (G) processes are

performed regarding all elements q positioned at the ends of said tree-structure of said second group. In view of the above, withdrawal of the rejections is respectfully requested.

The Examiner further asserts that there is insufficient antecedent basis for "equational tree automation accepts said selected term to be verified." In reply, the rejected or associated claims have been amended as reflected in the "Amendments to the Claims" section to resolve the issues addressed by the Examiner. For example, in Claims 1, 4 and 7, "a set of terms," "a selected set of terms to be verified," "(C) determining a set of terms" and "(G) determining a set of terms" have been amended to "a set of first terms," "a set of second terms to be verified," "(C) determining a set of third terms" and "(G) determining a set of fourth terms," respectively. Further, similar changes have been made to the remaining claims. In view of the above, withdrawal of the rejections is respectfully requested.

Comments on Examiner's Statement of Reasons for Allowance

Claims 1-9 and 13-15 have been indicated to be allowable if the 35 U.S.C. § 112 rejections are overcome. As discussed above, the claims have been amended to resolve all the issues addressed by the Examiner. Further, Applicant wishes to address the Examiner's statement of reasons for allowance in this Office Action mailed June 3, 2008. Applicant respectfully submits that the claims should be allowed based on the entire language rather than focusing on any specific portion thereof.

No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that

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Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

CONCLUSION

In view of Applicant's foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any remaining concerns which might prevent the prompt allowance of the application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below.
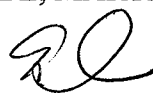
Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 9/3/2008

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